IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An integrated circuit including:

an output pad,

an output block coupled to the output pad via a capacitor,

a first one-way conduction element for connecting the pad to a supply line when the voltage on the pad exceeds the voltage of the supply line by a first threshold voltage,

a second one-way conduction element for connecting the pad to the circuit ground when the voltage on the pad is smaller than the ground voltage by a second threshold voltage, and

a resistor coupled on the one hand to the output pad and on the other hand to the supply line via a switch controlled to be turned off when the circuit is idle and to be turned on when the circuit is in a normal operating mode.

2. (Original) The circuit of claim 1, wherein the resistor has a small value as compared to a D.C. impedance of the load likely to be connected to the pad and a large value as compared to the A.C. impedance of said load.

3. (Original) The circuit of claim 1, wherein the switch is a MOS transistor.

4. (Original) The circuit of claim 1, wherein the first one-way conduction element is formed of a group of series-connected diodes.

5. (Original) The circuit of claim 1, wherein the second one-way conduction element includes two series-connected diodes.

6. (Original) The circuit of claim 1, wherein the output block includes:

a bipolar transistor, the collector of which is connected to the capacitor, the emitter of which is grounded, and the base of which receives the signal to be amplified, and

an inductive resistor connected between the collector of the bipolar transistor and the supply line.

7. (Previously presented) A method for driving a load with an AC signal, comprising acts of:

A) biasing the load with a DC signal only when the AC signal is present; and

B) preventing the load from drawing power when the AC signal is not present.

8. (Previously presented) The method of claim 7, further comprising an act of:

C) protecting the load from overvoltages and undervoltages of the AC signal.

9. (Previously presented) The method of claim 8, wherein the step C) further comprises acts of:

C1) coupling the AC signal to a voltage source when the AC signal exceeds a first threshold voltage so as to limit a positive cycle of the AC signal; and

C2) coupling the AC signal to ground when the AC signal goes below a second threshold voltage so as to limit a negative cycle of the AC signal.

10. (Previously presented) The method according to claim 9, wherein the DC signal is based at least in part on the first threshold voltage and the second threshold voltage.

11. (Previously presented) The method according to claim 10, wherein :

the act C1) includes an act of coupling the AC signal to the voltage source via a first unidirectional device having the first threshold voltage; and

the act C2) includes an act of coupling the AC signal to ground via a second unidirectional device having the second threshold voltage.

12. (Previously presented) The method according to claim 7, wherein the act B) further comprises an act of:

capacitively isolating the load from a source of the AC signal when the AC signal is not present.

13. (Previously presented) An apparatus, comprising:

at least one controller to drive a load with an AC signal, the at least one controller configured to bias the load with a DC signal only when the AC signal is present, the at least one controller further configured to prevent the load from drawing power when the AC signal is not present.

14. (Previously presented) The apparatus of claim 13, wherein the at least one controller comprises:

at least one first component coupled to the load and arranged to bias the load with the DC signal only when the AC signal is present; and

at least one second component coupled to the load and arranged to prevent the load from drawing power when the AC signal is not present.

15. (Previously presented) The apparatus of claim 14, wherein the at least one controller further comprises:

at least one third component coupled to the load and arranged to protect the load from overvoltages and undervoltages of the AC signal.

16. (Previously presented) The apparatus of claim 15, wherein the at least one third component comprises:

a first device coupled to the AC signal and arranged to couple the AC signal to a voltage source when the AC signal exceeds a first threshold voltage so as to limit a positive cycle of the AC signal ; and

a second device coupled to the AC signal and arranged to couple the AC signal to ground when the AC signal goes below a second threshold voltage so as to limit a negative cycle of the AC signal.

17. (Previously presented) The apparatus of claim 16, wherein the DC signal is based at least in part on the first threshold voltage and the second threshold voltage.

18. (Previously presented) The apparatus of claim 17, wherein:

the first device includes a first uni-directi onal device having the first threshold voltage; and

the second device includes a second uni-directional device having the second threshold voltage.

19. (Previously presented) The apparatus of claim 18, wherein each of the first device and the second device comprises at least one diode.

20. (Previously presented) The apparatus of claim 16, wherein the at least one first component comprises:

a resistor having a first terminal coupled to the load ; and

a current generating device having a first terminal coupled to the voltage source and a second terminal coupled to a second terminal of the resistor, the current generating device configured to be responsive to at least one control signal

21. (Previously presented) The apparatus of claim 20, wherein the current generating device comprises at least one MOS transistor.

22. (Previously presented) The apparatus of claim 21, wherein the at least one controller is arranged to receive the at least one control signal at a gate terminal of the at least one MOS transistor.

23. (Previously presented) The controller of claim 16, wherein the at least one second component comprises:

a capacitor coupled at a first terminal to a source of the AC signal and at a second terminal to the load.

24. (Previously presented) A circuit, comprising:

a first uni-directionally conductive device arranged to couple an output of the circuit to a voltage source, the first uni-directionally conductive device having a first threshold voltage;

a second uni-directionally conductive device arranged to couple the output of the circuit to ground, the second uni-directionally conductive device having a second threshold voltage;

a resistor having a first terminal coupled to the output of the circuit; and

a transistor having a first terminal coupled to the voltage source and a second terminal coupled to a second terminal of the resistor, the transistor configured to be responsive to at least one control signal so as to protect the output against overvoltages and undervoltages while reducing idle power consumption from the output.

25. (Currently amended) A method of protecting an integrated circuit from overvoltages and undervoltages while reducing idle power consumption, comprising steps of:

A) coupling an output node of the circuit to a voltage source using a first uni-directionally conductive element, based on a first threshold voltage of the element;

B) coupling the output node to ground using a second uni-directionally conductive element, based on a second threshold voltage of the element;

C) selectively providing a DC bias to the output node based on the first and second threshold ~~votages~~ voltages; and

D) capacitively isolating the output node when the DC bias is not present.